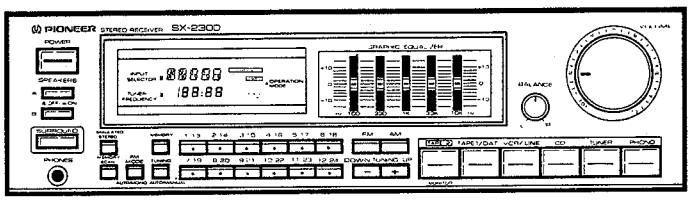
PIONEER®
The future of sound and vision.

Original

SX-2300
SX-1300

STEREO RECEIVER
AMPLI-SYNTONISEUR STEREO
STEREO-EMPFANGER
RICEVITORE STEREO
STEREO RECEIVER
STEREO RECEIVER
RECEPTOR ESTEREOFONICO
RECEPTOR ESTEREO



(SX-2300)

Operating Instructions
Mode d'emploi
Bedienungsanleitung
Istruzioni per l'uso
Gebruiksaanwijzing
Bruksanvisning
Manual de instrucciones
Manual de instruções

English

Français

Deutsch

Italiano

Nederlands

Svenska

Español

Português

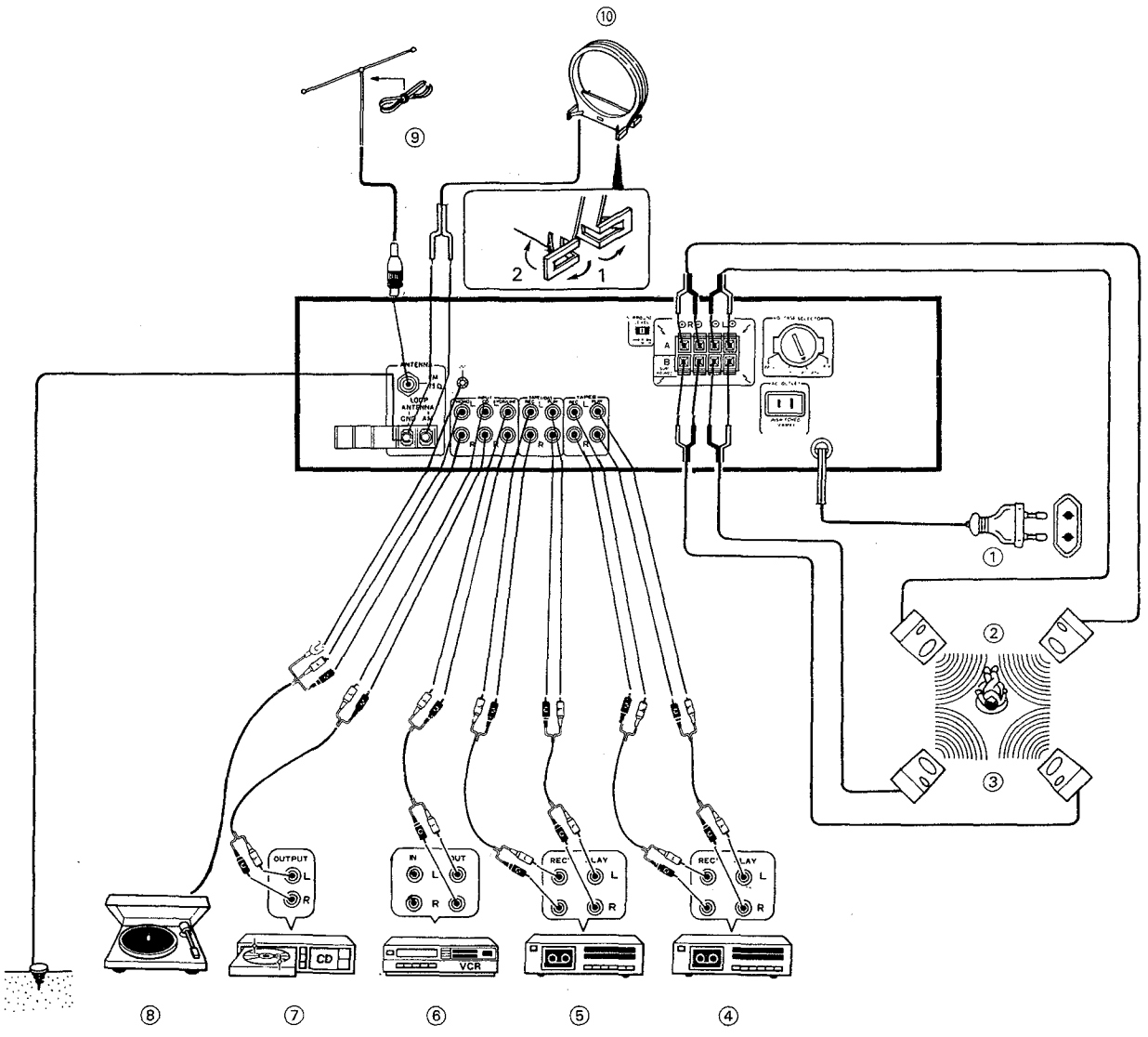
IMPORTANT

The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.


⑩
⑨
2
1
ANTENNA
OUTPUT
L
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CD
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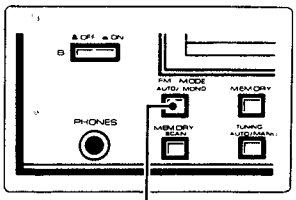
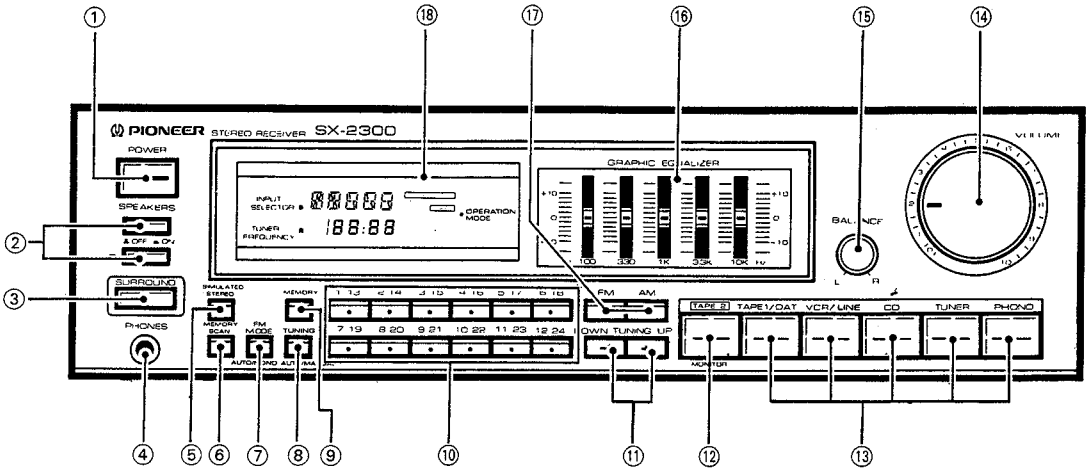
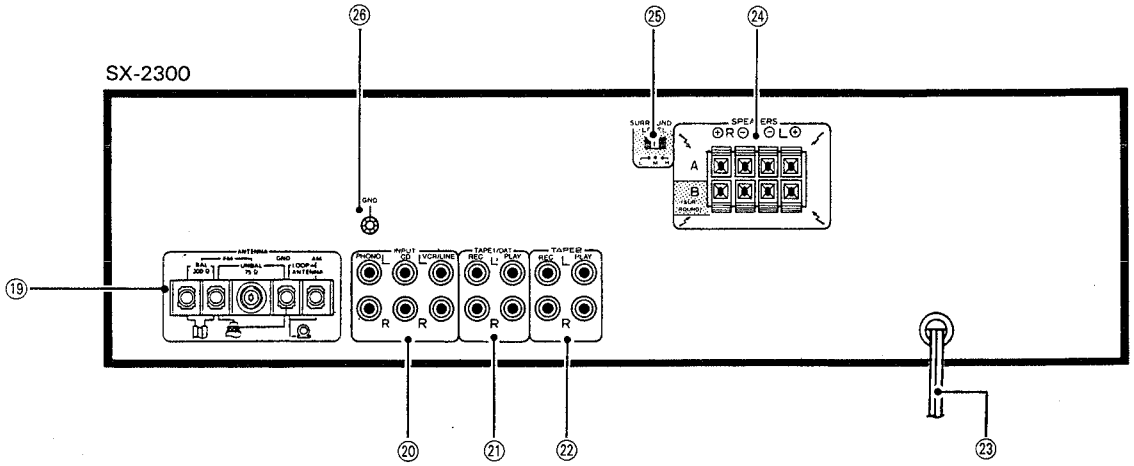
SX-1300





SX-2300



Thank you for buying this Pioneer product.
Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.

In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings. However, the method of connecting and operating the unit is the same.

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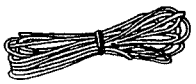
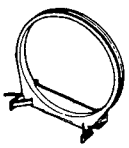
CHECKING ACCESSORY ITEMS



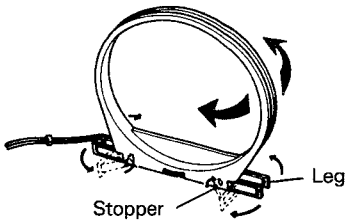
FM T-type Antenna



AM Loop Antenna

AM loop antenna construction

- Unfold all four legs of the AM loop antenna toward the outside, and insert the stopper inside the legs into the hole in the AM loop antenna to fix it in position.



FRONT PANEL FACILITIES

THE ILLUSTRATION SHOWS MODEL SX-2300.

① POWER switch
When this switch is pressed, power is supplied to the unit. Press the switch again to turn power off.

② SPEAKERS switches (▮ OFF, ▬ ON)
These are used to select the speaker through which you wish to listen.
A: When the speakers connected to A terminals are in use.
B: When the speakers connected to B terminals are in use.
- Turn both A and B speakers to OFF position when only the HEADPHONES are in use.

NOTE: (SX-1300 only)
No sound will be heard through the speakers when both A and B switches are depressed if only one set of speakers has been connected to either A or B SPEAKERS terminals.

③ SURROUND selector switch (SX-2300 only)
By pressing the A and B SPEAKERS switches, then pressing this switch ON, you can obtain surround reproduction. If you press this switch OFF again, normal reproduction from both speakers A and B will be obtained.

④ PHONES jack
Connect the plug on your headphones to this jack. To listen to a program through the headphones, set both SPEAKERS A and B switches to the OFF position.

⑤ SIMULATED STEREO switch (SX-2300 only)
This turns monaural signals into simulated stereo sound. Use this when you wish to experience the sense of stereo presence with AM broadcasts, VCR or other monaural signal sources.

NOTE:
This function can also be used with stereo sources, but it will result in a different sound from the normal stereo sound.

⑥ MEMORY SCAN switch
Press this switch to scan the stations in the memory.

⑦ FM MODE AUTO/MONO selector switch
Use to select the auto-stereo mode or monaural mode when listening to FM broadcasts. The monaural mode has been selected when the FM MONO indicator is lighted.
Auto-stereo mode:
Normally leave in this mode for reception. When a stereo FM broadcast is received, it will be automatically reproduced in stereo sound.
Monaural mode:
When receiving distant stations or stations with weak broadcast signals, the input signal may be weak, thus resulting in increased noise during FM stereo broadcasts. In this event, setting the receiver to the monaural mode will reduce the noise. In this case, however, FM stereo broadcasts will be reproduced in monaural sound.

NOTE:
This switch has no effect on reception of AM broadcasts.

⑧ TUNING AUTO/MANUAL switch
Works during FM reception.
Use this switch to select either the AUTO mode or the MANUAL mode. When the "AUTO" indicator is lit, the receiver is in the AUTO mode.
(See page 8)

⑨ MEMORY switch
This is used to memorize stations. When the switch is pressed, the frequency indicator will flash. To memorize the frequency of any station, press the STATION CALL switch while the frequency indicator is flashing. (See page 9)

⑩ STATION CALL switches
These switches are used to preset and recall desired broadcasting stations.

⑪ TUNING switches (DOWN, UP)
UP: The FM or AM band is scanned in the direction of increasing frequency.
DOWN: The opposite operation to that of the UP switch takes place.

⑫ Tape monitor switch
[TAPE 2] — Press when listening to tape playback with a tapedeck.

⑬ FUNCTION switches
Use to select playback source.
[TAPE 1/DAT] — Press when listening to tape playback with a cassette tape deck or digital audio tape deck.
[VCR/LINE] — Press when listening to programs from a component connected to the VCR/LINE terminals.
[CD] —Press when listening to compact disc playback with a CD player.
[TUNER] — Press when listening to AM or FM broadcasts with a tuner.
[PHONO] — Press when listening to record playback on a turntable.

⑭ VOLUME control
Use to adjust volume level.

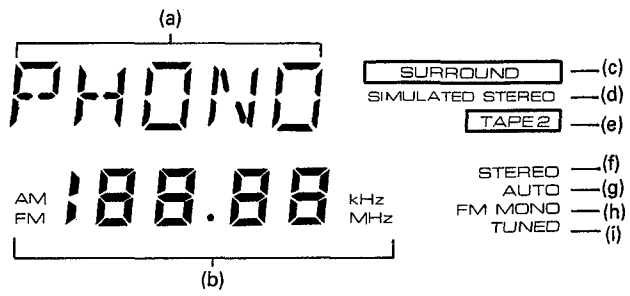
⑮ BALANCE control
Should normally be left in the center position. Adjust balance if the sound is louder from one of the speakers. If the right side is louder, turn toward the LEFT position and if the left side is louder, turn toward the RIGHT position.

⑯ GRAPHIC EQUALIZER controls
The equalizer is divided into five frequency ranges (100 Hz, 330 Hz, 1 kHz, 3.3 kHz, 10 kHz) to tailor music to the individual taste of the listener.

⑰ Band Selector switches
These switches are used to select either AM or FM reception.
AM: Push this switch for AM reception.
FM: Push this switch for FM reception.

⑱ OPERATION DISPLAY panel

(a) Indicates the function selected by the function switches.
(b) Indicates frequency or channel (STATION CALL number).
(c) SURROUND indicator
(d) SIMULATED STEREO indicator
(e) TAPE monitor indicates
(f) FM STEREO indicator
(g) AUTO tuning indicator
(h) FM MONO indicator
(i) TUNED indicator



REAR PANEL FACILITIES

⑲ FM/AM ANTENNA terminals

Use these antenna terminals for receiving FM and AM broadcasts.

⑳ INPUT jacks

PHONO ..... Connect to the output cables from a turntable.
CD ..... Connect to the output jacks of a compact disc player.
VCR/LINE..... Connect to the output jacks of a video cassette recorder etc.

㉑ TAPE 1/DAT jacks

Connect these jacks to the tape deck or digital tape deck.

㉒ TAPE 2 jacks

Connect these jacks to the tape deck.

㉓ POWER CORD

㉔ SPEAKERS terminals

A: Connect to a first set of speakers (or the front speakers in a surround system).
B: Connect to a second set of speakers (or the surround speakers in a surround system [SX-2300 only]).

㉕ SURROUND LEVEL selector switch (SX-2300 only)

By selecting one of the three positions (L: Low, M: Mid, H: High), the sound volume from the surround speakers can be changed.

㉖ GND terminal

Connect to the ground lead of a turntable.

CONNECTIONS

Refer to page 2 for the connections diagram
The example of connections is for the SX-2300.

① Household electrical outlet
② Speaker system A or front speakers
③ Speaker system B or surround speakers

NOTE:
Only the SX-2300 can be connected to a surround system.

④ Tape deck II
⑤ Tape deck I
⑥ VCR
⑦ CD player
⑧ Turntable
⑨ T-type FM antenna
⑩ AM loop antenna

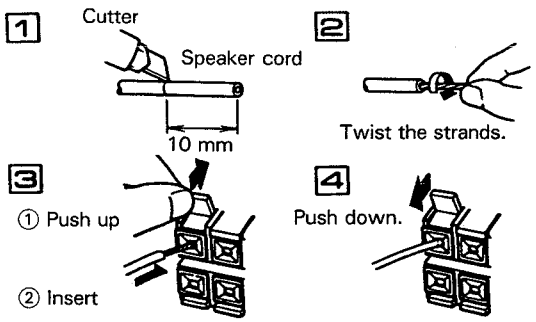
Antenna ground

Although grounding is not necessary for reception, it is recommended for protection against damage from lighting if an outdoor FM antenna is used. Grounding is recommended as well, to help reduce noise and hum.

NOTE:
Never make the ground connection to a gas pipe as sparks could cause the gas to ignite.

Audio input/output jacks of this unit are dull and tin-plated, aiming at high quality.

Connecting the speaker cords



Connecting the input/output cords

When another stereo component (purchased separately) is connected, note the following instructions:

- Connect the plugs properly. Faulty connections can cause noise and also breakdowns and failures.
- The white terminal is for the left channel and the red terminal is for the right channel.

NOTE ABOUT SPEAKER CONNECTIONS

[SX-2300]

When using either A or B:

- The speaker systems used should have an impedance of between 4 and 16 ohms.

When using A and B simultaneously:

- The speaker systems used should have an impedance of between 8 and 16 ohms.

When using a surround system:

- The speaker systems used should have an impedance of between 8 and 16 ohms.

[SX-1300]

- Speaker systems used should have an impedance of between 8 and 16 ohms.

[SX-2300/SX-1300]

- Be sure that connections are secure. Check to make sure that wires do not protrude from their terminals.
- Do not allow the speaker cords to become shorted. Damage may result to your unit.
- Do not attempt to simultaneously connect two sets of speakers to a single side (A or B). When using two sets of speakers connect one set to side A and one set to side B.

NOTE:
Only the SX-2300 can be connected to a surround system.

AM LOOP ANTENNA

- Unfold all four legs of the AM loop antenna toward the outside, and insert the stopper inside the legs into the hole in the AM loop antenna to fix it in position.
- Set the antenna on a level surface, and point in the direction that gives optimum reception.
- Do not install the antenna in locations where it touches the cover of the receiver or other metal objects, or near a CD player, personal computer, or television set.

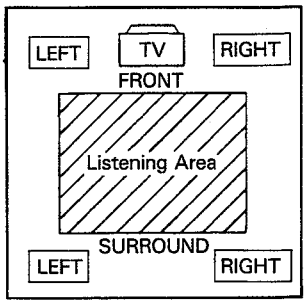
SURROUND SYSTEM (SX-2300 Only)

What is surround sound?

With ordinary stereo, sound normally comes only from speakers in front of the listener. In a concert hall or theater though, sound reflected from the walls and ceiling reaches the listener from all directions. This is what accounts for the feeling of ambience or spaciousness of a live performance. Surround sound works to reproduce these effects to provide fuller, more "live" sound.

Surround Speakers Installation Example

For getting the most out of the surround system, place the speakers as shown below.



SETTING THE UNIT PRIOR TO OPERATION

Before operating the unit, be sure to set it as shown below:

- **Set the volume control ⑭ to the "0" position.**
- **Press the SPEAKERS switch ② corresponding to the speaker system to be used.**
- **Set the BALANCE control ⑮ to the center position.**
- **Set the TAPE 2 switch ⑫ to OFF (released position).**

GRAPHIC EQUALIZER CONTROLS

The advantage of the GRAPHIC EQUALIZER over conventional tone controls is that with the five controls of the GRAPHIC EQUALIZER it is possible to control five different narrow, distinct sections of the audio band. With conventional tone controls a setting for a bass or treble boost or cut will also affect the lower or upper mid frequencies. The frequency bands controlled by the five slide controls have been chosen to yield the maximum possible control action within the audio spectrum.

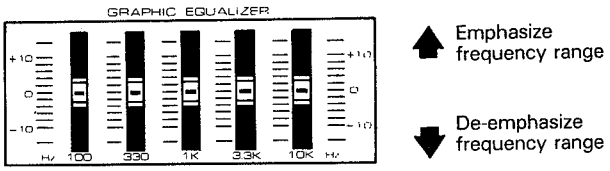
100 Hz: The 100 Hz control is very useful in enhancing low bass notes in organ music.

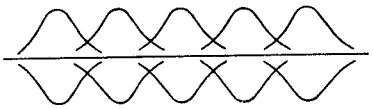
330 Hz: The 330 Hz control will allow you to vary the upper bass frequencies.

1 kHz: The 1 kHz control is the presence control and can be used very effectively to emphasize or de-emphasize vocalists.

3.3 kHz: The 3.3 kHz control will add brilliance and clarity to brass instruments and violins.

10 kHz: The 10 kHz control can be used to make up for missing high frequencies absorbed by the environment and to add a natural crispness to music.





LISTENING TO THE BROADCAST

- Check that all terminals are properly connected before switching on the unit.

AUTO TUNING (FM reception)

The electronic tuning circuit inside the unit will search for the station.

1. **Turn on the POWER switch ① of the unit.**
2. **Press the TUNER switch ⑬ of the function switches.**
3. **Set the band selector switches ⑰ for FM reception.**
4. **Press the TUNING MANUAL/AUTO switch ⑧ to establish the AUTO tuning mode (the AUTO indicator lights).**
5. **Press the TUNING switches ⑪ "UP (+)" or "DOWN (–)" for a higher or lower frequency as desired.**
   The frequency will change rapidly during scanning. The AUTO TUNING will stop automatically when the station is located and the TUNED indicator will light up.

   NOTE:
   When the AUTO TUNING is in use, reception may not be possible over long distances or when signals are weak. At these times manual tuning is recommended.
6. **Adjust the volume with the VOLUME control ⑭ and the tone with the GRAPHIC EQUALIZER controls ⑯.**

MANUAL TUNING (FM/AM reception)

1. **Turn on the POWER switch ① of the unit.**
2. **Press the TUNER switch ⑬ of the function switches.**
3. **Select your desired broadcasting band using the band selector switches ⑰.**
4. **Press the TUNING MANUAL/AUTO switch ⑧ to establish the MANUAL tuning mode. (The AUTO indicator goes off.)**
5. **Use the TUNING switches ⑪ to locate the frequency of the desired station.**
   For step-by-step searching, press the TUNING switch once and release it immediately. For continuous rapid scanning keep the TUNING switch pressed. The TUNED indicator will light up when the desired station is turned in best.

   NOTE:
   The TUNED indicator will not function for broadcasts received over long distances or when signals are weak.
6. **Adjust the volume with the VOLUME control ⑭ and the tone with the GRAPHIC EQUALIZER controls ⑯.**

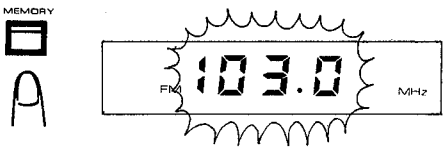
PRESETTING STATIONS

PRESETTING

1. **Turn on the POWER switch ① of the unit.**
2. **Select band of station to be memorized ⑰.**
3. **Tune in desired station ⑪.**
   - See the AUTO TUNING section for information on reception using Auto Tuning.
   - See the MANUAL TUNING section for information on reception using Manual Tuning.

When memorizing an FM station, either press the FM MODE switch to forcibly memorize the station in the monaural mode, or memorize the station in the auto stereo mode (with FM MODE switch left in the MONO position).

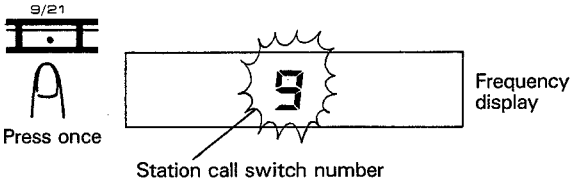
4. **Press the MEMORY switch ⑨.**
   - The display will flash (about 5 seconds).



5. **Press the STATION CALL switch ⑩.**
   - While the display is flashing, press the switch corresponding to the station which you wish to preset or re-preset.

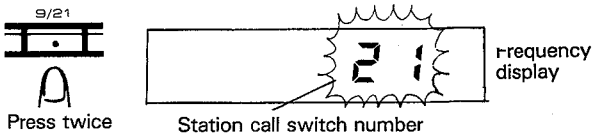
When presetting a station to Mode 1 (e.g. presetting a station to No. 9):

By pressing the station call switch once, the station will be preset to Mode 1. (1 ~ 12)



When presetting a station to Mode 2 (e.g. presetting a station to No. 21):

By pressing the station call switch twice, the station will be preset to Mode 2. (13 ~ 24)



- After you press the STATION CALL switch, the display will flash for about 3 seconds, then the station will be memorized. If you press another switch while the display is flashing, the station will not be memorized.

MEMORY SCAN

Pressing the MEMORY SCAN switch ⑥, radio broadcasts preset in the memory are scanned in order for convenient confirmation. The scanning of preset stations can be cancelled by pressing the MEMORY SCAN switch once more or by pressing one of the STATION CALL switches.

RECEPTION USING PRESET TUNING

1. **Press the STATION CALL switch ⑩ into which the desired station has been memorized.**
   - To listen to a Mode 1 broadcast, press the switch once, and to listen to a Mode 2 broadcast, press it twice.
   - By pressing the STATION CALL switch, the switch number will be displayed, then the frequency will be displayed.

In this way, simple and accurate reception of any desired station is possible.

NOTE:

- *If a preset station has been erased, consult with a Pioneer authorized service station.*

Last station memory

- When the amplifiers POWER switch is pressed to turn the power on, the last station received before the power was previously turned off will be received again.
- When power is ON, if the BAND selector switch is pressed, the last station received before the BAND selector switch was previously pressed will be received again.

TO LISTEN TO OTHER MUSIC SOURCES

1. **Turn on the POWER switch ① of the unit. Also turn on the power to the stereo components you wish to use.**
2. **Use the function switches ⑬ and tape monitor switch ⑫ as appropriate to select the desired program source.**

	FUNCTION switch	TAPE MONITOR switch
To listen to a tape on the tape deck connected to TAPE 2 jacks	—	TAPE 2 ON
To listen to the component connected to VCR/LINE jacks	VCR/LINE	OFF
To listen to a CD	CD	OFF
To listen to records	PHONO	OFF
To listen to TAPE 1/DAT	TAPE 1/DAT	OFF

3. **Operate the appropriate stereo component to play back the program source.**
4. **Adjust the volume with the VOLUME control ⑭ and the tone with the GRAPHIC EQUALIZER controls ⑯.**

TAPE RECORDING

[For a tape deck]

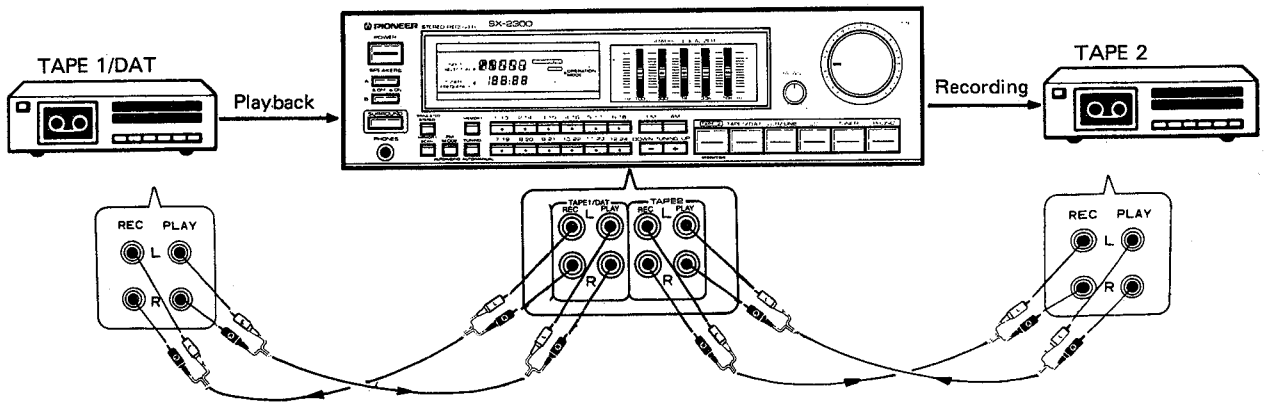
You can record an FM or AM broadcast, or a sound source connected to the VCR/LINE, CD, PHONO, or TAPE 1/DAT terminals.

1. **Turn on the POWER switch ① of the unit.**
2. **Select the sound source to be recorded.**
3. **Turn on (or start) the sound source to be recorded.**
4. **Operate the tape deck connected to the TAPE 1/DAT or TAPE 2 terminals.**
   - For details of operating the tape deck, read the operating instructions of the tape deck.

COPYING TAPES

When two tapes decks are used, the sound played back on the deck connected to the TAPE 1/DAT jacks can be recorded on the deck connected to the TAPE 2 jacks.

- To make a tape copy with contents identical to the original tape.
- To edit a recording of an FM broadcast in order to cut out unwanted commercials, recording only the desired material onto another tape.



[When using two tape decks]

1. **Load the playback tape (i.e. the pre-recorded tape) in the deck connected to the TAPE 1/DAT jacks ㉑, and the tape to be recorded in the other deck connected to the TAPE 2 jacks ㉒.**
2. **Press the proper Function switch.**
   - To copy from the tape deck connected to TAPE 1/DAT jacks to the deck connected to the TAPE 2 jacks, ... Press TAPE 1/DAT.
3. **Operate the tape decks to begin copying.**
   Set the tape deck with the original (playback) tape to the playback mode, and set the tape deck with the non-recorded tape to the recording mode.

HINTS FOR BETTER RECEPTION

EXTERNAL FM ANTENNA

The main advantage of FM over AM is the quality of the broadcast signal. In order to benefit fully from the high signal quality of FM broadcasts, it is recommended that a special-purpose FM antenna be installed. In weak signal areas, a multi-element (3 element, 5 element, 7 element) antenna should be used.

NOTE:
Consult your dealer as to the selection and actual installation of the FM antenna.

FM ANTENNA CONNECTIONS

There are two ways of connecting the FM antenna to the antenna input terminals: with a 300-ohm twin-lead feeder or with a 75-ohm coaxial cable. If full justice is to be done to the tuner's performance, a 75-ohm coaxial cable is recommended since it is more immune than the twin-lead feeder to noise and interference from external sources. If an FM antenna has already been erected outdoors, connect it, referring to the figure.

GROUNDING

Grounding is recommended if reception of FM programs is impaired by noise. To ground, connect a thick polyvinyl wire to the GND terminal and attach the other end to a metal water pipe or grounding bar or wind it around a copper plate and bury it.

NOTE:
Never connect a wire to a gas pipe for grounding since sparks may ignite the gas.

OUTDOOR AM ANTENNAS

If it is not possible to obtain adequate AM reception even by changing the orientation of the AM loop antenna, a separate indoor antenna, or an outdoor antenna should be installed.

INDOOR AM ANTENNA

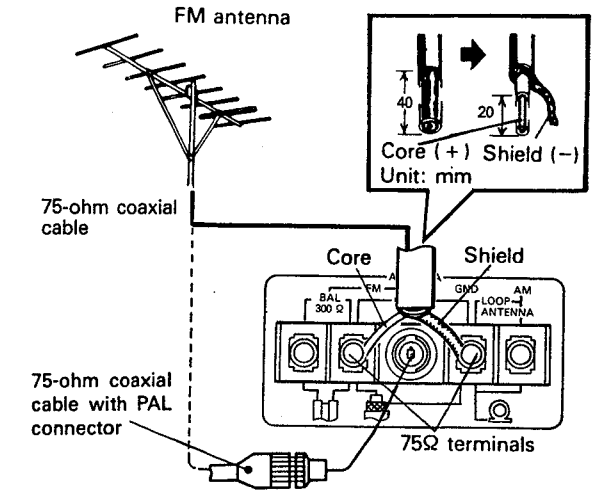
Use a vinyl insulated wire (5 — 6 m) and connect one end to the AM antenna terminal and affix the other end to the wall or ceiling, as high as possible.

OUTDOOR AM ANTENNA

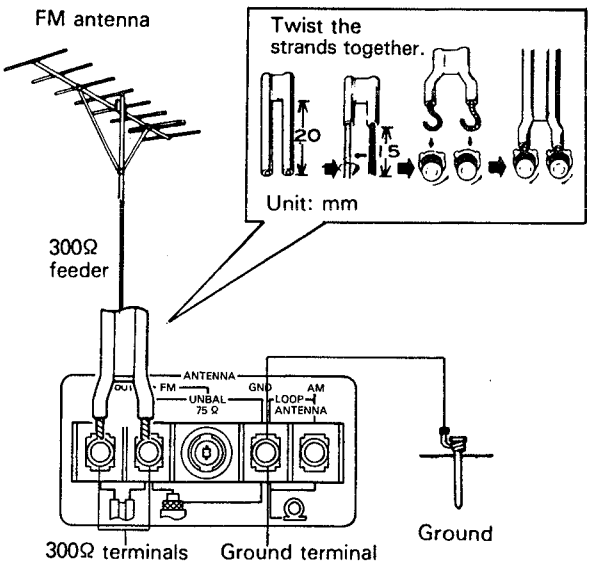
If reception quality is not improved sufficiently even when an indoor antenna is used, a vinyl insulated wire should be installed outside and fixed in place.

NOTE:
Do not detach the AM loop antenna when using an indoor or an outdoor AM antenna.

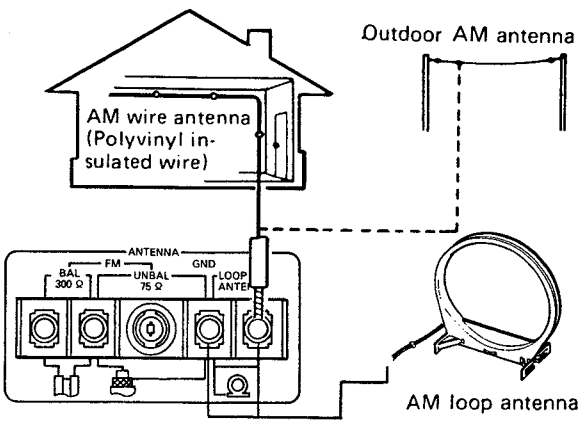
Connecting the coaxial cable



Connecting the 300Ω feeder



Connecting the Outdoor AM antenna



TROUBLESHOOTING

Incorrect operations are often mistaken for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Investigate the other components and electrical appliances being used. If the trouble cannot be rectified even after exercising the checks listed below, ask you nearest PIONEER authorized service center or your dealer to carry out repair work.

Symptom	Caused	Remedy
Power does not come on even when POWER button is pressed.	• Power cord is disconnected.	• Connect cord securely.
No sound is produced, even when FUNCTION button is selected.	• VOLUME control is set to 0 (MIN),	• Turn the VOLUME control toward.
	• Speakers connecting wires are disconnected from speaker terminals.	• Connect wires to terminals securely.
	• One or both of the input cords are disconnected.	• Connect input cords securely.
	• TAPE 2 switch is in the ON position.	• Press the switch to the OFF position.
Sound is produced from one speaker only.	• BALANCE control is set too far to one side or the other.	• Set BALANCE control to center position.
	• One of the speaker connecting wires or input cords is disconnected.	• Connect wires and cords securely.
Noise is produced during reception of AM broadcasts when the power button of this unit or other components is turned ON or OFF.	• AM loop antenna picks up electrical noise created by switch contacts.	• Place AM loop antenna as far away as possible from this and other components.
High noise level.	• Station has not been tuned in to correct frequency.	• Tune the station in correctly.
	• Antenna has not been connected or has become disconnected.	• Connect the antenna securely.
	FM reception • Accessory T-type antenna remains bundled up or it is not pointing in the right direction.	• Stretch both ends of antenna taut and locate in direction yielding optimum reception.
	• Weak broadcasting station signals.	• Replace accessory T-type antenna with outdoor FM antenna.
	• Noise picked up from other equipment (or, in particular, from passing automobiles). • Multipath results when signals from broadcasting station entering antenna directly are mixed with signals which have been reflected by mountains or high building on their way to antenna. This results in distorted sound and noise.	• Try altering direction and mounting position of antenna. If an outdoor antenna has been erected, place it as far away as possible from passing traffic and replace connecting cable with 75-ohm coaxial cable.
	AM reception • AM antenna not pointing in right direction.	• Change AM antenna's direction and find a position where reception is improved.
	• Weak broadcasting station signals.	• Erect outdoor AM antenna or connect ground wire.
	• Noise being picked up from other equipment (especially electrical appliances using motor or fluorescent lights).	• Stop using appliances generating noise or remove them from vicinity of stereo equipment.
No auto stop. (FM reception)	• Input signals are not strong enough.	• If a T-shaped antenna is used, change over to an outdoor antenna. • Perform manual tuning.

SPECIFICATIONS

[Model SX-2300]

Amplifier Section

Continuous Power Output (both channel driven, DIN)
- 1 kHz, T.H.D. 1%, 4 Ω ..... 80 W + 80 W
- 1 kHz, T.H.D. 1%, 8 Ω ..... 65 W + 65 W
- 20 Hz — 20 kHz, T.H.D. 0.07%, 8 Ω ..... 50 W + 50 W

(IEC)
- 63 Hz — 12.5 kHz, T.H.D. 0.7%, 4 Ω ..... 74 W + 74 W
- 63 Hz — 12.5 kHz, T.H.D. 0.7%, 8 Ω ..... 63 W + 63 W

(Dynamic power output)
- 2/4/8 Ω ..... 120/110/80 W

Total Harmonic Distortion*
- 1 kHz, 50 W, 8 Ω 0.01%

Input (Sensitivity/Impedance)
- PHONO ..... 2.5 mV/47 kΩ
- CD, VCR/LINE, TAPE 1/DAT, TAPE 2 ..... 150 mV/22 kΩ

Phono Overload Level (T.H.D. 0.01%, 1,000 Hz)
- PHONO ..... 130 mV

Output Level
- TAPE REC ..... 150 mV

Frequency Response
- PHONO (RIAA Equalization) ..... 20 Hz to 20,000 Hz ±0.5 dB
- CD, VCR/LINE, TAPE 1/DAT, TAPE 2 ..... 10 Hz to 70,000 Hz $^{+0.5}_{-3.0}$dB

Signal-to-Noise Ratio (DIN, continuous power/50 mW)
- PHONO ..... 68 dB/59 dB
- CD, VCR/LINE, TAPE 1/DAT, TAPE 2 ..... 86 dB/60 dB

Graphic Equalizer frequency band
- ..... 100Hz, 330 Hz, 1 kHz, 3.3 kHz, 10 kHz, ±8 dB

FM Tuner Section

Frequency range ..... 87.5 MHz to 108 MHz
Usable Sensitivity ..... 10.8 dBf, IHF (0.95 μV/75 Ω)
50 dB Quieting Sensitivity
- MONO ..... 15.3 dBf (1.6 μV/75 Ω)
- STEREO ..... 37.1 dBf (19.5 μV/75 Ω)

Sensitivity (DIN)
- MONO ..... 0.9 μV/75 Ω
- STEREO ..... 29 μV/75 Ω

Signal-to-Noise Ratio
- MONO ..... 78 dB (at 85 dBf)
- STEREO ..... 75 dB (at 85 dBf)

Signal-to-Noise Ratio (DIN)
- MONO ..... 66 dB
- STEREO ..... 60 dB

Distortion
- STEREO ..... 0.3% (1 kHz)

Alternate Channel Selectivity ..... 55 dB (400 kHz)
Stereo Separation ..... 35 dB (1 kHz)
Frequency Response ..... 30 Hz to 15 kHz (±1 dB)
Antenna Input ..... 300 Ω balanced, 75 Ω unbalanced

AM Tuner Section

Frequency range ..... 531 kHz to 1,602 kHz
Sensitivity
- IHF, Loop antenna ..... 300 μV/m

Selectivity ..... 20 dB
Signal-to-Noise Ratio ..... 50 dB
Antenna ..... AM Loop Antenna

Miscellaneous

Power Requirements ..... A.C. 220 V~, 50/60 Hz
Power Consumption ..... 470 Watts
Dimensions ..... 420 (W) x 120 (H) x 337 (D) mm
Weight (without package) ..... 7.0 kg

Furnished Parts

FM T-type Antenna 1
AM Loop Antenna 1
Operating Instructions 1

NOTE:

Specifications and design subject to possible modification without notice due to improvements.

- *Measured by audio spectrum analyzer.

[Model SX-1300]

Amplifier Section

Continuous Power Output (both channel driven, DIN)
- 1 kHz, T.H.D. 1%, 4 Ω ..... 55 W + 55 W
- 1 kHz, T.H.D. 1%, 8 Ω ..... 45 W + 45 W
- 40 Hz — 20 kHz, T.H.D. 0.07%, 8 Ω ..... 38 W + 38 W

(IEC)
- 63 Hz — 12.5 kHz, T.H.D. 0.7%, 4 Ω ..... 49 W + 49 W
- 63 Hz — 12.5 kHz, T.H.D. 0.7%, 8 Ω ..... 45 W + 45 W

(Dynamic power output)
- 4/8 Ω ..... 70/55 W

Total Harmonic Distortion*
- 1 kHz, 38 W, 8 Ω 0.01%

Input (Sensitivity/Impedance)
- PHONO ..... 2.5 mV/47 kΩ
- CD, VCR/LINE, TAPE 1/DAT, TAPE 2 ..... 150 mV/22 kΩ

Phono Overload Level (T.H.D. 0.01%, 1,000 Hz)
- PHONO ..... 130 mV

Output Level
- TAPE REC ..... 150 mV

Frequency Response
- PHONO (RIAA Equalization) ..... 20 Hz to 20,000 Hz ±0.5 dB
- CD, VCR/LINE, TAPE 1/DAT, TAPE 2 ..... 10 Hz to 70,000 Hz $^{+0.5}_{-3.0}$dB

Signal-to-Noise Ratio (DIN, continuous power/50 mW)
- PHONO ..... 68 dB/59 dB
- CD, VCR/LINE, TAPE 1/DAT, TAPE 2 ..... 86 dB/60 dB

Graphic Equalizer frequency band
- ..... 100Hz, 330 Hz, 1 kHz, 3.3 kHz, 10 kHz, ±8 dB

FM Tuner Section

Frequency range ..... 87.5 MHz to 108 MHz
Usable Sensitivity ..... 10.8 dBf, IHF (0.95 μV/75 Ω)
50 dB Quieting Sensitivity
- MONO ..... 15.3 dBf (1.6 μV/75 Ω)
- STEREO ..... 37.1 dBf (19.5 μV/75 Ω)

Sensitivity (DIN)
- MONO ..... 0.9μV/75 Ω
- STEREO ..... 29 μV/75 Ω

Signal-to-Noise Ratio
- MONO ..... 78 dB (at 85 dBf)
- STEREO ..... 75 dB (at 85 dBf)

Signal-to-Noise Ratio (DIN)
- MONO ..... 66 dB
- STEREO ..... 60 dB

Distortion
- STEREO ..... 0.3% (1 kHz)

Alternate Channel Selectivity ..... 55 dB (400 kHz)
Stereo Separation ..... 35 dB (1 kHz)
Frequency Response ..... 30 Hz to 15 kHz (±1 dB)
Antenna Input ..... 300 Ω balanced, 75 Ω unbalanced

SPECIFICATIONS

AM Tuner Section

Frequency range ..... 531 kHz to 1,602 kHz
Sensitivity
IHF, Loop antenna ..... 300 μV/m
Selectivity ..... 20 dB
Signal-to-Noise Ratio ..... 50 dB
Antenna ..... AM Loop Antenna

Miscellaneous

Power Requirements ..... A.C. 220 V~, 50/60 Hz
Power Consumption ..... 250 Watts
Dimensions ..... 420 (W) x 120 (H) x 337 (D) mm
Weight (without package) ..... 6.2 kg

Furnished Parts

FM T-type Antenna 1
AM Loop Antenna 1
Operating Instructions 1

NOTE:
Specifications and design subject to possible modification without notice due to improvements.

- *Measured by audio spectrum analyzer.